Amendments to the Abstract:

A method of mounting an optical device having a step on the surface opposing to a mounting substrate favorably by face-down bonding which enables a decrease in the number of components or integrate additional components on one identical substrate and, accordingly, is useful for reducing the size and the thickness of an optical head using a light source, the method typically-includes the step of making the volume of a solder pattern to the area ratio of each electrode to a solder pattern different for every wiring electrode portions upon mounting the electrodes on the substrate for mounting the optical device, in which the optical device having the step can be mounted favorably to the substrate by the control for the height of solder upon melting, and the volume of the solder is previously controlled depending on the wettability of a region of the substrate covered by the solder.